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ABSTRACT

This curriculum guide explains the national health care skills standards and lists skill standards for health care technicians, especially in Michigan. The 10 sections of the guide cover the following: (1) introduction to the national health care skills strands; (2) allied health technologies multiskilled curriculum framework and program design options; (3) overview of multiskilling and the health care work force; (4) the multiskilled health care core curriculum; (5) the multiskilled patient care technician curriculum; (6) multiskilled patient care technician advanced skills curriculum; (7) phlebotomy curriculum; (8) basic electrocardiography curriculum; (9) patient care technical competencies; and (10) a bibliography that contains 24 references. (KC)

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Allied Health Technologies
Multiskilled Patient Care
Technician Curriculum

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Introduction to National Health Care Skills Strands

Section I

Introduction

Over the past ten years, health care has been one of the nation's fastest growing industries. It faces many challenges created by a rapidly changing environment in the decades ahead. These include an increasingly diverse client population, remodeled delivery systems, and new technology. To meet such challenges, health services of tomorrow may look radically different from today. If current trends continue, experts have predicted that most care will be delivered in outpatient centers, perhaps even in community-based networks of facilities. Inpatient care will come to mean "intensive care." And more care will be delivered in the client's home.

The decade of the 1990s has brought increasing awareness that revisions in the way health care is delivered and financed are a national priority. Since 1985, health care reform proposals have been written at the national, state, and organizational levels all across the nation. Six principles have provided the foundation for reform: quality, security, simplicity, responsibility, choice, and savings. The ultimate goal is to deliver quality care for all at a price society can afford.

To achieve this goal, one element of health care reform stands out as fundamental and essential: the education and training of the nation's *over 10 million health care workers*. The level of knowledge and skill of the current and future workforce is critical if quality health care is to be secure, simple, responsibly delivered, and characterized by consumer choice and savings.

In recognition of the need for a highly skilled health care workforce, the U.S. Department of Education has funded the National Health Care Skill Standards Project (NHCSSP), a collaborative endeavor among health services, labor, and the education community to better prepare tomorrow's health care worker by developing skill standards today.

Health care skill standards are statements that answer the question, "What does a worker need to *know* and be able to *do* to contribute to the safe and effective delivery of health care?" The standards will inform current and future health care workers, employers, and educators what skills and knowledge workers need to succeed—in a job and in a career. It is envisioned that these standards will help provide the foundation for better worker preparation, both in school and on the job.

The Benefits of Skills Standards

A major benefit of having nationally validated health care skill standards is the potential to forge strong links among various stakeholders. National skill standards can provide a common language, common goals, and a common reference point for employers, workers, students, labor, educators, and consumers. In addition, national skill standards can provide benefits particular to each stakeholder. For example:

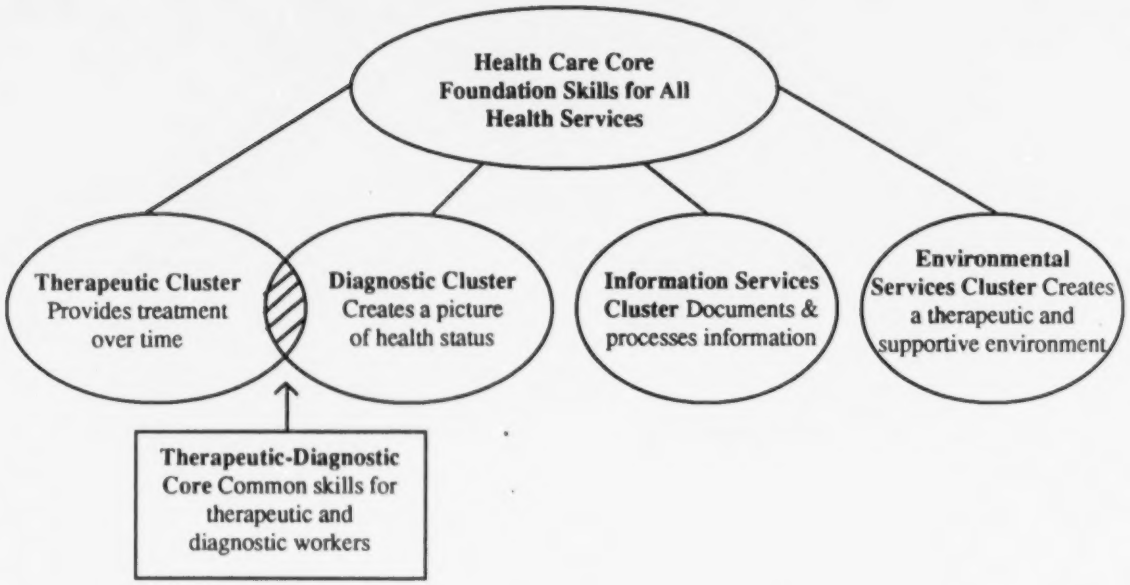
- Employers can recruit, screen, and place potential employees more efficiently.
- Workers can know what to expect on the job and be better prepared, thereby increasing their mobility and opportunity for advancement.
- Labor organizations can increase employment security through portable skills and credentials.
- Students can have clear direction to help them set goals and train for future employment.
- Educators can design quality curriculum and instruction consistent with the needs of the industry.
- Consumers can benefit from high quality, efficient health-care delivery from well-trained workers.

The National Health Care Skill Standards have grouped the major health care occupations into four clusters of related occupations and functions:

- **Therapeutic*** functions maintain or change the health status of the client *over time*—including care management, dentistry, dietetics, home health medicine, nursing, pharmacy, rehabilitation, respiratory care, and others.
- **Diagnostic*** functions create a picture of client health status *at a single point in time*—including cardiology, imaging, medical laboratory, radiography, and others.
- **Information services** functions documents client care—including medical records management, unit coordination, utilization review, and others.
- **Environmental services** functions provide a therapeutic environment for the delivery of care—including central supply, facility maintenance, food service, housekeeping, and others.

*There is a notable overlap between the knowledge and skills required for therapeutic and diagnostic functions. A set of standards applicable to both was developed and is referred to as the *therapeutic/Diagnostic Core*.

Health Care Core and Occupational Clusters



The Dictionary of Occupational Titles (DOT) categorizes occupations according to how they function in relation to people, things, or data. Similarly, the health care clusters reflect the object of the workers' attention: therapeutic and diagnostic workers interact with *people* (clients), environmental service workers manipulate *things*, and information service workers manipulate *data*. The cluster standards represent common expectations of workers across occupations within each cluster.

Rather than replace existing credentialling or licensing, these newly proposed core and cluster standards serve as a foundation for later career specialization and apply to a majority of health care workers. This configuration is consistent with the *Carl D. Perkins Vocational and Technology Education Act of 1990*. The Perkins Act mandates broad vocational training, rather than job-specific training, and an integration of academic and vocational skills. The Act also requires programs to provide students with a general understanding of "all aspects of the industry."

Allied Health Technologies Multiskilled Curriculum Framework and Program Design Options

Section II

Allied Health Technologies Multiskilled Curriculum Framework

The Allied Health Technologies Curriculum addendum is intended to provide content standards, indicating what knowledge and/or skills are expected. They are not performance standards that indicate the level of achievement necessary to demonstrate mastery.

The Allied Health Technologies instructor may continue to use the Health Occupations Curriculum currently recommended and incorporate all or some of the Multiskilled Curriculum. Local health care workforce trends will drive how much, how little, or any use at all of the curriculum. The content standard statement consists of two or three parts: 1) a brief title describing the topic or skill area covered, 2) where applicable, a general description of knowledge or skills based upon the *National Health Care Skills Standards* (identified by italics), and 3) specific applications that *should* be included as the *minimum* content.

Allied Health Technologies
Program Design Options (Suggested)
One-Year Program Model

Review of your program philosophy will be your guide on what to teach. Are you giving students an academic base to enable transition to a college program, or are you preparing students for an entry level position as a nursing assistant, multi-skilled Patient Care Assistant (PCA), dental assistant, or medical assistant?

Sample Calendar

Weeks 1-9

Health Care Core (MSC)

- Communications
- Systems/Trends in Health Care
- Ethical/Legal
- Safety/Infection Control

Anatomy, physiology, and medical terminology could be taught throughout the year.

Weeks 10-18

Medical Terminology	MSC: 1c
Anatomy	MSC: 1d
Isolation	PCT 6
Client Mobilization	PCT 8
Monitoring Client Status	PCT 4
Job Shadowing Experience	

Weeks 19-28

Nutrition and Fluid Balance	PCT 21
Specimen Collection	PCT 17
Admission to the Healthcare Facility	PCT 20
Client Hygiene and Comfort	PCT 12
Body Systems and Related Care	PCT
Clinical Externship	

Weeks 29-36

Advanced Skills	PCTA
Thermal Therapy	PCTA 3
Physical Examination	PCTA 4
Surgical Client	PCTA 1

Clinical Practicum, minimum 20 hours

Two-Year Program Model
Allied Health Technologies I

Semester I

Health Care Core
- Basic Medical Terminology
- Basic Anatomy and Physiology
- Medical Math
- Ethical/Legal
- Employability
- Safety
- Communications
- Systems

Job Shadowing

Semester II

Health Maintenance
Client Interactions
Intrateam Communications
Job Shadowing
Certified Nursing Assistant (OBRA)
Clinical Practicum

Allied Health Technologies II

Weeks 1-9

Clinical Practicum
Review Anatomy and Physiology
Review Medical Terminology
Begin Patient Care Technician

Weeks 10-18

Anatomy Case Study
Clinical Practicum

Weeks 19-27

Basic Life Support—Professional (3 weeks)
Phlebotomy (3 weeks)
EKG (3 weeks)
Externship in Career Choice Occupation

Weeks 28-36

Internship in Career Choice Occupation
Project/Case Study
Portfolio Presentation

Job Shadowing/Clinical Intern/Externships

Job Shadowing experiences are of short duration—one or two days. The student's role is one of observer. This experience should not take place until students have completed course work in:

Safety/Infection Control
Ethics
Communications
Professionalism

An internship will provide the student with an in-depth work experience in an occupational area. The student should be on an internship for a *minimum* of three weeks. Internships are usually *unpaid*. The student should be assigned to a worksite preceptor during their clinical hours.

An externship is very similar to an internship; however, it may be longer than three weeks. Students are usually *paid* during the externship time. A preceptor is assigned to work with the student and may be responsible for evaluating the student's performance.

Each student should select at least *four* occupational areas. The student should be encouraged to select not only from individual areas of interest but also from a sampling of clusters. Occupations that are starred are in high demand because of shortages. Consideration should be given to areas where there are future job opportunities.

Therapeutic Cluster

* Occupational Therapist/COTA
* Pharmacist
* Physical Therapist/Assistant
  Recreational Therapist
Respiratory Therapist
  Athletic Trainer
* Perfusionist
  Dialysis Technicians
* Physician
    Medical
    Osteopathy
* Chiropractic

* Podiatric
* Physician's Assistant
* Medical Assistant

Nursing
- RN
- * LPN
- * Practitioner
- * Midwife
- * CENA

Surgical Technologist
* Dieticians
Dietetic Aid
Medical Social Worker
Psychologist
* EMT/Paramedic

Diagnostic Cluster

* Electrocardiograph Technician
* Electroencephalographic Technician
* Cytotechnologist
* Histotologic Technician
* Medical Technologist
Medical Laboratory Technician
Medical Laboratory Assistant
* Radiologic Technologist
Nuclear Medicine Technician
Radiation Therapy Technologist
Ultrasonographer
* Biomedical Equipment Technician

Information Services Cluster

Administrative Medical Assistant
* Health Unit Coordinator
* Medical Records Analysis
* Medical Transcriptionist
* Medical Billing Coder
* Admitting Technician
* Case Manager

Administration/Human Resources

Healthcare Administrator
Marketing/Public Relations
Human Resources Manager
Risk Management

Health-Care Related

Dental

Dentist
* Dental Hygienists
Dental Assistant
* Dental Laboratory Technician

Veterinary

Veterinarian
Animal Care Technician
Veterinarian Assistant

Vision Services

Opthamologist
* Optometrist
* Optometric Technician
* Optician
* Optical Laboratory Technician

Overview: Multiskilling and the Health Care Workforce

Section III

Overview: Multiskilling and the Health Care Workforce

Multiskilling has become an integral part of the health care culture. Usually restructuring, reengineering, or work redesign entails some cross-training, job expansion, or broadening of scopes of practice. Current interest in the multiskilled worker is not limited to hospital settings. The Pew Health Professions Commission's symposium on "The Future of the Allied Health Workforce: Perspectives on the Demand in 2005" indicates widespread interest in cross-training and a growing demand for multiskilled workers in HMOs, group practices, community health centers, as well as in rural and urban hospitals.

Employers are searching for brief, cost-effective programs to produce needed personnel. Growing numbers of people are voicing concerns about the quality of care that will be provided. The level of this concern is related to what skills are being added, to whom, how the training is conducted, and how competency is assessed. While multiskill training is done primarily to save money, time and resources must be invested in the training process.

The advent of multiskilling is viewed as a major threat by the various allied health professions and with nursing. Job descriptions are confusing as to who can do what, and scopes of practice are beginning to overlap in some places. Multiskilling may not be supported by some allied health professionals and their associations. The entire concept of multiskilled education is very complex, with few resource people around to assist.

In education and health care, which as an Allied Health Technologies educators you combine both disciplines, our plates are becoming full of new and challenging opportunities to help prepare the workforce of 2005 and beyond. The future calls for a new paradigm in health care, a new culture in our hospitals and other health care settings, and expanded roles for health care workers.

Providers must assure the highest quality care for greater numbers of patients, using fewer resources, at an overall reduced cost. They must eliminate work, decrease nonvalued-added time, eliminate extra layers of supervision and management, and, therefore, host the multiskilled concept. Fewer people will be working more closely together to prevent problems before they occur and to accept more responsibility for themselves and for overall team and client outcomes.

There seems little doubt that multiskilling will be an integral part of the health care culture of the future. Multiskilling has become a valuable approach to meeting a

number of health care challenges. We know that for our students to become valuable workers we must be flexible and responsive to the changing needs of employers. Meeting the needs of area employees is an important part of the Career Technical Education Mission.

The information contained in this document is to be used as an addendum to the existing Health Occupations curriculum developed by the Michigan Department of Education Office of Career Technical Education. Instructors are encourages to tailor the curriculum to meet individual student and local employer needs.

The role of the Allied Health Technologies instructor will be to work with the program advisory committee and local employers to identify potential skill combinations for the health care workers in their community. An additional task will be to use this new model to design curriculum, instructional delivery, and competency assessments that are the appropriate educational approach for their program. It is hoped that instructors will pick and choose and adopt and adapt from existing and new curricula.

We have attempted to make this document "user friendly" by allowing for flexibility in program and curriculum design at the instructor's discretion. The content presented here is intended as a model or template for local adaptation and use.

Assumptions about Multiskilling

- The expectation is that training programs will expose the worker to general components described below which appear to be common to most hospitals using PCTs.
- Hospitals may need to tailor the curriculum to meet the needs of their patient care setting.
- The PCT will function as a member of the patient care team.
- Literacy and math skills are expected to be acquired prior to training.
- The desire to acquire additional interpersonal and communication skills will make this training program more successful.
- Typically, exposure to the health care environment (i.e., medical terminology, EKG, nursing assistant, or phlebotomy) will make candidates more successful in this program.
- Hospitals will be required to provide clinical opportunities for students in the program.

- Individuals will be able to enter the program from several disciplines (i.e., nursing assistant, phlebotomist, EKG techs, medical assistant, etc.) or with no previous health care experience.
- Students completing their course work could continue their education in other health-related fields.

Behavioral Components to Be Emphasized in the Curriculum

- Patient-centered care
- Customer service
- Team work concepts, including delegation, communication, and ethics
- Cost containment

Advanced Components that may be in a Multiskilled Curriculum

- Phlebotomy
- Respiratory Care
- Sterile technique
- CPR
- Catherization
- EKG

Multiskilled Healthcare Core Curriculum

MSC

Section IV

Multiskilled Healthcare Core Curriculum (MSC)

MSC1 Academic Foundations

Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role.

1a. Read and write, including charts, reports, and manuals.

1b. Perform basic mathematical functions
- compute simple math problems
- use charts, graphs
- use a calculator
- use simple formulas
- measure using the metric system

1c. Use health care terminology
- use common medical abbreviations
- define selected prefixes, suffixes, and word roots
- define simple medical terms
- spell and pronounce simple medical terms
- demonstrate use of a medical dictionary

1d. Apply knowledge of life sciences
- anatomy
- biology
- chemistry
- physics
- nutrition
- human growth and development

1e. Use technology in health care
- use computer applications in today's health care system

1f. Identify current trends in health care, including:
- wellness
- home health care
- cost containment measures
- multiskilling

1g. Describe health care information resources, including:
- medical library
- health answers
- Internet, Compuserve, America On-Line

MSC2 Communications

Health care workers will know various communication methods to give and obtain information. They will communicate effectively, both orally and in writing.

2a. Describe the communication process

2b. Identify barriers to communication

2c. Explain the importance of listening

2d. Describe nonverbal communication cues

2e. Evaluate individual needs and adapt communication

2f. Demonstrate sensitivity to multicultural and multilingual needs

2g. Access and use electronically produced information

MSC3 Systems

Health care workers will understand how their role fits in with their colleagues, their setting, and the overall health care environment. They will identify how key systems relate to the services they perform and affect quality of care.

3a. Differentiate uniquess among the different types of health care services and settings, including:
- hospitals
- LTC
- dental
- clinics
- laboratories
- rehabilitation
- HMOs
- government agencies
- nonprofit

3b. Explain various mechanisms for funding health care services
- insurance
- Health Maintenance Organizations (HMOs)
- Preferred Provider Organizations (PPOs)
- Medicare
- Medicaid
- Workers Compensation

3c. Identify cost containment measures, including:
- workplace redesign, reductions
- DRGs
- case management
- outpatient services
- mass/bulk purchasing

MSC5 Employability Skills

Health care workers will understand how employability skills enhance their employment opportunities and job satisfaction. They will demonstrate key employability skills and will maintain and upgrade skills, as needed.

5a. Evaluates own personal traits

5b. Demonstrates personal skills
- attendance
- time management
- individual responsibility

5c. Demonstrates professional conduct and appearance

5d. Uses an analytical approach to problem solving and decision making

5e. Describes career options and preparation required for each

5f. Develop career goals

5g. Develop career portfolio

5h. Identify employee legal rights and responsibilities

5i. Demonstrate job-seeking skills
- write letter of application
- write a resume
- complete an application

MSC6 Legal Responsibilities

Health care workers will understand their legal responsibilities, limitations, and the implications of their actions with the health care delivery setting. They will perform their duties in accordance with laws, regulations, policies, and legislated rights of clients.

6a. Describe the 3-5 most common malpractice and liability issues in health care

6b. Explain the concept "scope of practice"

6c. Define privileged communication

6d. Maintain client confidentiality

6e. List legal requirement for documentation

MSC7 Ethics

Health care workers will understand accepted ethical practices with respect to cultural, social, and ethnic differences, particularly within the health care environment. They will perform their duties within established ethical guidelines, supporting sensitive and quality health care delivery.

7a. List basic ethical rules for health care workers

7b. Describe client rights and self-determination

7c. Identify activities that may adversely affect health and safety of clients and coworkers

MSC8 Safety Practices

Health care workers will be aware of the existing and potential safety hazards to clients, coworkers, and self. They will prevent injury or illness through safe work practices and follow health and safety policies and procedures.

8a. Describe common emergency procedures and protocols

8b. Identify common unsafe conditions

8c. Demonstrate universal precautions

8d. Demonstrate principles of body mechanics

8e. Identify safety measure for fire and electrical hazards

8f. Describe hazardous materials waste management

8g. Define OSHA standards related to health care workers

8h. Identify most common modes of disease transmission

8i. Demonstrate isolation techniques

8j. Describe common practices used to ensure client safety

MSC9 Interpersonal Dynamics

Health care workers will understand the role and responsibilities of individual members as part of the health care team, including their ability to promote the delivery of quality health care. They will interact effectively and sensitively with all members of the health care team.

9a. Demonstrate appropriate confrontation skills with the workplace

9b. Identify inter- and intra-disciplinary issues

9c. Demonstrate team membership skills
- cooperation
- collaboration
- leadership

MSC10 Describe Health Maintenance Practices

Health care workers will understand the fundamentals of wellness and the treatment of disease processes. They will encourage the practice of preventive health behaviors among their clients.

This should include:

- knowledge of available preventive health screenings and examinations
- preventive health practices, such as good nutrition and stress management
- knowledge of illness prevention

Multiskilled Patient Care Technician

PCT

Section V

Multiskilled Patient Care Technician

Job Description: Responsible for direct patient care services on a specific hospital or ambulatory care unit under the supervision of a registered nurse. Responsibilities include personal care to complex patients, implementation of selected portions of care plan, including respiratory services, rehabilitation services, EKG, and phlebotomy under the supervision of licensed care givers. Performs routine treatments and procedures; assists with application of equipment and assistive devices; and observes and reports changes in patient conditions.

Outcomes for the Multiskilled Patient Care Technician Curriculum

- Demonstrates understanding of the care giver's role in assisting the patient to obtain optimal health status.
- Performs functions using concepts of safe practice for clients and providers, including aseptic technique, body mechanics, and universal precautions.
- Implements selected portions of care plan to provide effective care for patients (i.e., assists patient with activities of daily living).
- Functions as an effective member in an integrated health care team.
- Performs duties using principles of customer service and confidentiality with consideration to patient rights.
- Communicates with patients and their families to identify and respond to specific patient needs and reports to RN as necessary.
- Communicates with patient, family, and health-team members in a manner that maintains dignity and respect.
- Identifies normal parameters of patient conditions and appropriately reports deviation from norms.
- Adapts work assignments to meet the dynamic needs of a patient care environment.
- Completes assignments as directed, reports regularly, and documents, consistent with the established guidelines to record activities, using appropriate medical terminology.

PCT1 Demonstrate Professional Demeanor

This should include:

- grooming
- praise
- speech
- body language
- attitude

PCT2 Demonstrate Intrateam Communication

Patient Care Technicians will understand how to communicate within a team. They will convey critical client information to appropriate team members in a timely manner.

This should include:

- unsafe environmental conditions
- unusual occurrences and incidents
- documenting and reporting changes in client conditions
- oral
- written
- medical terminology

PCT3 Describe Professional Ethics and Legal Responsibilities

This should include:

- confidentiality
- medical legal concepts
- ethical code of conduct

PCT4 Monitoring Client Status

Patient Care Technicians will understand the process for monitoring client health status. They will assess health status according to respective professional standards and report results to the treatment team.

This should include:

- temperature: glass, electronic, oral, rectal, axillary, tympanic
- pulse: apical, radial, doppler
- respirations
- blood pressure: manual, electronic
- height/weight: electronic, sling, balance
- oxygen saturation

- glucometer
- intake and output
- admission/transfer/discharge

PCT5 Collect Data

Patient Care Technicians will know the facility protocol and guidelines for collecting data. They will report results and assist the treatment team in identifying client health care needs, strengths, and problems.

This should include:

- observe client environment and instrumentation
- record and report information
- follow policies and protocols

PCT6 Demonstrate Aseptic Procedures

Patient Care Technicians will know the work practices that maintain a clean and healthy environment. They will follow recommended practices to reduce or eliminate pathogenic organisms.

This should include:

- basic microbiology
- asepsis
- universal precautions
- Occupational Safety and Health Act
- Clinical Laboratory Improvement Act
- common communicable diseases
- isolation
  - —barrier
  - —reverse

PCT7 Demonstrate Safety Procedures

This should include:

- body mechanics
- protective devices
  - —siderails
  - —vest, ankle, wrist, mitt restraints
- radiation safety
- risk management
- incident documentation

PCT 8 Perform Client Mobilization

Patient Care Technicians will understand the principles of proper body mechanics for positioning, transferring, and transporting clients. They will perform these activities efficiently and without injury to clients or self.

This should include:

- body mechanics
- ambulation: crutches, cane, walker, gait belt
- turning, moving, positioning, hoyer lift
- transferring: wheelchair, stretcher, chair, slide boards
- range of motion
- use of supportive devices
- safety principles

PCT9 Treatment Planning

Patient Care Technicians will understand the general purpose and components of the treatment plan. They will assist in planning procedures according to facility protocol.

This should include:

- client involvement
- use of available resources
- problem identification
- common interventions

PCT10 Implement Procedures

Patient Care Technicians will understand the procedures within their scope of practice and how these procedures relate to the goals and objectives of the treatment plan. They will execute the procedures accurately and in a timely fashion, supporting the treatment team.

This should include:

- organizational skills/time management
- documentation
- appropriate use of equipment

PCT11 Provide Client Interaction

Patient Care Technicians will understand how to explain planned procedures and goals to clients. They will use various explanation strategies and answer clients' questions.

This should include:

- determine clients' ability to understand
- respond to client's concerns and fears
- use language appropriate to the situation
- use facility guidelines for giving health care information
- respect clients' cultural differences

PCT12 Provide Client Hygiene and Comfort

This should include:

- bathing:
  - —bed
  - —shower
  - —assisted
- perineal care
- vaginal douche/irrigation
- massage/backrub
- feeding
- oral care:
  - —conscious
  - —unconscious
  - —dentures
  - —edentulous
- grooming
- shaving
- shampooing
- skin care:
  - —preventive measures
  - —State I and Stage II pressure ulcers
- nail care: feet, hands
- application of TED stockings
- pneumatic TED hose
- bedmaking
  - —occupied
  - —unoccupied
  - —surgical

- comfort devices
  - —bed cradle
  - —foot board
  - —air/water mattress
- catheter care

PCT13 Use Medical Equipment

This should include:

- preparation for use
- cleaning and disinfection
- calibration
- minor repairs/troubleshooting
- monitor readiness of emergency equipment

PCT14 Provide Oxygen Therapy Assistance

This should include:

- oxygen safety
- care and maintenance of equipment
- application/removal
- documentation
- coughing and deep breathing
- incentive spirometers
- pulse oximeter
- suction: oral, nasal, trach

PCT15 Demonstrate Elimination Procedures

This should include:

- bedpan/urinal use
- beside commode
- adult diapering
- bowel and bladder training
- application of urinary condom
- ostomy application
  - —equipment
  - —technique
  - —removal/disposal

- rectal tube
  - —purpose
  - —procedure
  - —precaution
- enemas
  - —purpose
  - —procedures
  - —precautions
- catheterization
  - —purpose
  - —procedures
  - —precautions
  - —irrigations

PCT16 Demonstrate Specimen Collection

This should include:

- urine
  - —voided
  - —CCMS
  - —catheter/closed system
- capillary (blood glucometer)
- sputum
- stool

PCT 17 Perform Specimen Testing

This should include:

- reagent/dip sticks
- equipment
  - —glucometer
  - —hemacult
- quality/safety controls
- reporting/recording results

PCT18 Perform Environmental/Housekeeping Operations

Patient Care Technicians will understand the importance and rationale for maintaining an environment that is aesthetically appealing. They will uphold facility standards for service, maintenance, and upkeep.

This should include:

- cleaning the client unit equipment
- cleaning the client environment
  - —waste disposal
  - — table surfaces
  - —linens
- emptying collection containers
  - —GOMCO
  - —suction

PCT19 Perform an Admission

This should include:

- client orientation
- room set-up
- securing of valuables
- data collection and documentation

PCT20 Provide Nutrition and Fluid Balance

This should include:

- basic nutrition information
- oral feeding
- tube feeding
  - —nasogastric
  - —gastrostomy
    - >continuous with pump
    - >bolus
    - >irrigation/flushes
    - >safety precautions
    - >sterility
  - —maintenance
  - —gloving

PCT21 Demonstrate Emergency Procedures

This should include:

- recognition of emergency situations
- identification of appropriate protocols for emergency situations
  - —code blue
  - —code red
  - —weather
  - —disaster
- CPR
- choking
- First Aid
  - —burns
  - —bleeding
  - —poisoning
  - —seizures

PCT22 Provide Care for Psychologically Stressed Client

This should include:

- common mental health conditions
- suicide precautions

PCT23 Demonstrate Care of the Geriatric Client

This should include:

- types of care facilities
- resident's rights
- characteristics of aging
- aging process
- safety
- assistive devices
- restorative care

Completing the Michigan Department of Public Health Nurse Aide Training Curriculum will meet this content outcome.

PCT24 Provide Care for the Dying Client

This should include:

- needs
  - —psychological
  - —physiological
  - —spiritual
- stages of grief
- ethical issues/legal procedures
- hospice/community resources
- postmortem care

PCT25 Identify Body Systems and Related Care

This should include:

25A The Integumentary System

- skin assessment
- common conditions and interventions
  - —lesions
  - —pressure ulcers
  - —burns
  - —wound care

25B The Respiratory System

- common conditions and interventions
  - —pneumonia
  - —COPD
  - —asthma
  - —emphysema
  - —tuberculosis

25C Cardiovascular System

- diagnostic tests
  - —EKG
  - —telemetry monitor application
- common conditions and intervention
  - —peripheral vascular disease
  - —hyper/hypotension
  - —coronary artery disease

—angina pectoris
—myocardial infarction (MI)
—thrombus/embulus
—congestive heart failure (CHF)
—blood abnormalities

25D Musculoskeletal System
- common conditions and interventions
  - —arthritis
  - —fractures
  - —osteoparesis
  - —loss of a limb
- equipment
  - —CPM machine
  - —traction
  - —casts

25E Endocrine System
- diagnostic testing
- common conditions and interventions
  - —hypo/hyperthyroidism
  - —Cushing's syndrome
  - —Addison's disease
  - —diabetes
    - >Type I
    - >Type II

25F Nervous System
- diagnostic testing
- common conditions and interventions
  - —increased intercranial pressure
  - —CVA
  - —Parkinson's syndrome
  - —Multiple Sclerosis
  - —seizures
  - —spinal cord injuries
  - —meningitis
- equipment

25G Gastrointestinal System

- diagnostic testing
- common conditions and interventions
  - —ulcers
  - —hernias
  - —carcinomas
  - —gallbladder conditions
- special procedures
  - —enema/rectal tube
  - —ostomy appliances
- equipment

25H Urinary System

- diagnostic testing
- common conditions and interventions
  - —male
  - —female
- sexually transmitted diseases (STDs)
  - —trichomonas vaginitis
  - —gonorrhea
  - —syphilis
  - —herpes
  - —chlamydia
  - —HIV
  - —ARC
  - —AIDS

Multiskilled Patient Care Technician Advanced Skills

PCTA

Section VI

Patient Care Technician Advanced Skills (PCTA)

PCTA1 Provide Surgical Care

This should include:

- preoperative care
- teaching
- physical preparation
- documentation and data collection
- postoperative care
- vital signs
- drainage
- prevention of respiratory complications

PCTA2 Demonstrate Assistance with IV Therapy

This should include:

- observations
- IV dressing change
- IV pump troubleshooting
- IV discontinuation

PCTA3 Provide Thermal Therapy

This should include:

- cold applications
  - —moist
  - —dry
- heat applications
  - —moist
  - —dry
- equipment
  - —K-pad/aqua pad
- cooling bath
- safety precautions

PCTA4 Perform a Dressing Change

This should include:

- simple
- sterile
- staple removal

PCTA5 Demonstrate Suctioning Techniques

This should include:

- oral
- nasal
- tracheal

PCTA6 Assist with Physical Examination

This should include:

- equipment
- supplies
- positions
- after care

Phlebotomy

PHL

Section VII

Phlebotomy (PHL)

PHL1 Apply Knowledge of Infection Control and Safety

This should include:

- universal precautions
- infection control
- isolation
- safe handling and proper disposal of equipment

PHL2 Demonstrate Planning Skills

Diagnostic workers will understand the components and implications of requests for procedures. They will read the request for services and plan when and how to implement the services.

PHL3 Display Preparedness

Diagnostic workers will know the steps of procedural set-ups. They will prepare the supplies, equipment, and client for procedures, according to protocol.

This should include:

- identify and gather equipment necessary for procedure
- routinely maintain and calibrate equipment
- explain procedures and give related information to client

PHL4 Demonstrate Quality Assurance (Evaluation)

Diagnostic workers will understand the principles of quality control standards. They will continuously evaluate the procedure and its product.

This should include:

- analyze product for diagnostic quality and take appropriate action
- customize, adjust, or modify procedures, as needed and within established guidelines
- liability
- incident reports

PHL5 Identify Various Sites on the Body from which to Draw Blood

This should include:

- venous
- capillary
- arterial

PHL6 Describe Equipment Used to Draw Blood

This should include:

- veins
- capillaries
- arteries

PHL7 Demonstrate Collection Procedures

Diagnostic workers will know the logic and sequence of the procedure, including alternative methods. They will perform procedures to create precise and accurate products.

This should include:

- supplies and equipment
- sample quality
- documentation
- venipuncture
- capillary stick
- arterial blood gas puncture

PHL8 Discuss Precautions Needed for Special Procedures

This should include:

- pediatric
- elderly
- oncology
- coagulation

PHL9 Describe Specimen Handling for Specialized Testing

This should include:

- additive
- environmental factor
- storage
- transporting

PHL10 Report Results

Diagnostic workers will understand the need for precise, accurate, and timely reporting. They will produce and report results using appropriate communication channels.

This should include:

- using written, oral, and keyboarding skills to produce reports
- delivering reports to all appropriate parties
- confirm that all necessary information is received by the parties involved

PHL11 Applied Clinical Practice

This should consist of 80-100 sticks under supervision.

Basic Electrocardiography

EKG

Section VIII

Basic Electrocardiography (EKG)

EKG1 Identify Basic Cardiovascular Anatomical Structures

This should include:

- major arteries
- chambers
- values
- musculature
- coronary blood supply

EKG2 Place Precardial Electrodes

This should include:

- using landmarks to determine heart position

EKG3 Commonly Used Cardiac Drugs

EKG4 Explain the Origin, Implication, and Measurement of Common EKG Intervals

This should include:

- PR
- QRS
- S-T
- wave diffusion
- heart and normal sinus rhythm

EKG5 Describe Common Electronic Concepts Used in Electrocardiography

This should include:

- single-channel EKG electrodes
- patient and equipment grounding
- basic maintenance and repair of equipment

EKG6 Demonstrate Single-Channel EKG Testing Procedure

This should include:

- patient preparation
- electrode placement
- precautions

EKG7 Document Data During Procedure

This should include:

- normal rhythm
- abnormal rhythm
- artifacts

EKG8 Describe Methods of Data Presentation

This should include:

- selection of representative segments
- labeling of strips
- preparation for review
- report delivery

EKG9 Identify Additional Noninvasive Tests

This should include:

- stress testing
- halter monitoring
- pacemakers
- echocardiology

EKG10 Applied Clinical Practice

This should include a minimum of 10 EKGs, including clinical processing.

Patient Care Technical Competencies

Section XI

Master List of Patient Care Technical Competencies

Activities of Daily Living

Bathing
- bed
- shower
- assisted

Perineal care
Backrub/massage
Oral care
- * conscious
- * unconscious
- * dentures
- * edentulous

* Foot care
* Nail care
* Assist with dressing
Shaving a male patient
Giving a patient a shampoo
Skin care/integrity
- Stage I and II ulcers

Applying TED hose
Using pneumatic TED hose
Making an occupied bed
Making an unoccupied bed
* Making a surgical bed
* Comfort devices
- * bed cradle
- * foot board
- * air/water mattress

Elimination

Assisting with elimination
- bedside commode
- bedpan
- urinal

Applying a urinary condom
Adult diapering
* Bowel/bladder training

Administering an enema
Care of patient with rectal tube
Insertion and maintenance of Foley urinary catheter
* Emptying a Urinary Drainage Unit
Removing a Foley catheter
Irrigating a Foley
Care for indwelling catheter

Mobility

Assisting with ambulation
    * crutches, canes, walkers, gait belts
Logrolling a patient
Moving a patient up in bed
* Aligning the patient
* Turning the patient away to change position
* Turning the patient inward to change position
Sitting up to dangle
Transferring
    chair
    * cardiac chair
    wheelchair
    stretcher
    * mechanical lift
* Use of supportive devices
* Range of motion
* Positioning a patient
* Leg exercises

Data Collection

Measuring and recording of intake and output
* Calorie count
Measurement of temperature
    oral
    electronic
    tympanic
    axillary
    rectal

Measurement of pulse
    radial
    * apical
    * doppler
Measurement of blood pressure
    Dinamap monitor
Measurement of weight
    * electronic
    * sling
    balance
Admission of a patient to nursing unit and completion of nursing admission assessment (demographic form)
    * orientation to room, belongings check list
* Pulse oximeter
* Abdominal girth
* Reporting/documentation
Computer access and data entry

Gastrointestinal Tubes and Drains

Gastrostomy/jejunostomy tube care (PEG, PEJ)
Irrigation of gastrointestinal tubes
Bolus tube feedings (NG, G-tube, or J-tube)
Infusion of continuous tube feeding and management of Kangaroo feeding pump
Ostomy care
    cleaning/emptying
Changing a colostomy appliance

Feeding and Nutrition

Provision of food and fluids
    feeding the helpless patient
    assisting the patient who can feed self
* Fluid restrictions
* Assisting with menu selection

Obtaining Specimens

Obtaining a sterile urine sample via indwelling catheter
Collecting UA, Clean-Catch-Mid-Stream
* 24-hour urine

One-touch blood sugar testing
Testing urine for carbohydrates, acetone, and other variables
Obtaining a sputum specimen
Obtaining a stool specimen
    * occult blood
* Labeling and transport of specimens

Oxygen and Respiratory Therapy

Instruction and reinforcement of patient use of incentive spirometer (IS) and cough and deep breathing (C&DB)
Set up of oxygen therapy
Maintenance of oxygen therapy
* Suction
    * oral
    * nasal/trach

IV Therapy

* Observation for signs/symptoms of infection, infiltration
* Observation for leaking bag, tubing, site
* IV dressing change

Safety

Applying restraints
    siderails
    vest
    ankle
    wrist
    mitt
CPR/First Aid/emergency procedures
Universal precautions
Infection control procedures/isolation
Applying principles of aseptic/sterile technique

*** Equipment**

Maintenance
Cleaning
Calibration

Trouble shooting
Check equipment
    crash cart
    defibrillator
    oxygen cylinder

Miscellaneous

* Thermal therapy
    moist compress
    sitz bath
    ice bag/collar
    K-pad
Providing postmortem care
Preparing a patient for surgery
Emptying suction collection container
Giving a vaginal douche
    vaginal irrigation
* Assist with physical examinations
* Assist with procedures
    equipment/supplies
    patient positioning/care
* Staple removal
* Dressing change
    simple
    sterile
* Transport patient as necessary
    transport/discharge

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Section XII

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